3. The electronic device of claim 2, wherein the first compensation value is generated based at least in part on a frequency of the touch stimulus signal.

4. The electronic device of claim 1, wherein the first compensation value for a given pixel of the plurality of pixels is generated based at least in part on a location of the given pixel on the electronic display.

5. The electronic device of claim 1, wherein the second cross-talk comprises a first change in a reference voltage of the third electrode in response to a second change in a data line voltage signal of the second electrode.

6. The electronic device of claim 1, wherein the reference voltage cross-talk compensation circuitry is configured to estimate an error in a reference voltage of the third electrode based at least in part on a change in voltage of the second electrode during a transition from programming of a first row of the electronic display to programming of a second row of the electronic display.

7. The electronic device of claim 1, wherein the reference voltage cross-talk compensation circuitry is configured to estimate an error in a reference voltage of the third electrode for a given pixel based at least in part on an aggregate of a plurality of individual errors associated with a row of pixels of the plurality of pixels.

8. The electronic device of claim 7, wherein the aggregate comprises a spatial average of the plurality of individual errors about the given pixel.

9. The electronic device of claim 1, wherein the reference voltage cross-talk compensation circuitry is configured to estimate an error in a reference voltage of the third electrode based at least in part by referencing a look-up-table configured to map a difference between a first data line voltage signal of the second electrode during programming of a first pixel of the plurality of pixels and a second data line voltage signal of the second electrode during programming of a second pixel of the plurality of pixels to the error.

10. A method comprising:

receiving, via image processing circuitry, input image data corresponding to an image to be displayed on an electronic display;

generating compensated image data based at least in part on the input image data and an estimated voltage variation within pixel circuitry of the electronic display, wherein the estimated voltage variation is associated with cross-talk comprising an electromagnetic coupling between one or more data lines of the pixel circuitry and a reference voltage electrode of the pixel circuitry, wherein the estimated voltage variation is based at least in part on an estimated change in a reference voltage on the reference voltage electrode; and

outputting, via the image processing circuitry, the compensated image data.

11. The method of claim 10, comprising determining the estimated change in the reference voltage based at least in part on a change in one or more data line voltages.

12. The method of claim 10, wherein the estimated voltage variation comprises an estimated difference between an intended voltage differential and an actual voltage differential, wherein the intended voltage differential comprises a first difference between a data line voltage signal of the one or more data lines and an ideal reference voltage of the reference voltage electrode, wherein the actual voltage differential comprises a second difference between the data line voltage signal and an affected reference voltage signal of the reference voltage electrode.

13. The method of claim 10, wherein the compensated image data is based at least in part on the input image data, the estimated voltage variation, and a second estimated voltage variation, wherein the second estimated voltage variation is associated with a second cross-talk comprising a second electromagnetic coupling between the one or more data lines of the pixel circuitry and touch sensor circuitry of the electronic display.

14. The method of claim 13, wherein the compensated image data is generated based at least in part on a first compensation value associated with the estimated voltage variation and a second compensation value associated with the second estimated voltage variation.

15. The method of claim 13, wherein the second estimated voltage variation is determined based at least in part on a frequency of a touch stimulus signal of the touch sensor circuitry.

16. The method of claim 10, wherein the one or more data lines comprises a plurality of data lines, and wherein the estimated change in the reference voltage is determined based at least in part on an aggregate of changes in voltages on the plurality of data lines.

17. A system comprising:

an electronic display comprising pixel circuitry, wherein the pixel circuitry comprises:

a pixel configured to emit light based at least in part on a data line voltage signal; and

a data line configured to supply the data line voltage signal to the pixel;

touch sensor circuitry configured to:

generate a stimulus signal at a frequency on an electrode; and

detect an electromagnetic interference with the stimulus signal corresponding to a touch presence; and

image processing circuitry configured to compensate image data for a cross-talk based at least in part on the frequency of the stimulus signal, wherein the cross-talk comprises an electromagnetic coupling between the electrode of the touch sensor circuitry and the data line of the pixel circuitry.

18. The system of claim 17, wherein the image processing circuitry is configured to compensate the image data for the cross-talk based at least in part on a location of the data line on the electronic display.

19. The system of claim 17, wherein the pixel circuitry comprises a reference electrode configured to supply a reference voltage to the pixel, wherein the image processing circuitry is configured to compensate the image data for a second cross-talk, wherein the second cross-talk comprises a second electromagnetic coupling between the data line and the reference electrode.

20. The system of claim 19, wherein the image processing circuitry is configured to compensate the image data for the second cross-talk based at least in part on a difference between the image data associated with a first pixel value and the image data associated with a second pixel value, wherein the difference is associated with a change in the reference voltage on the reference electrode.

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